MICROH

PROFESSIONAL PRODUCTS

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USER MANUAL

ULTRA TRINITY 280

Keep this manual for future reference.

1. INTRODUCTION AND UNPACKING

Thank you for purchasing the MICROH ULTRA TRINITY 280 moving head fixture. For your own safety and knowledge, please read this manual before installing or operating the device. This manual covers the important information on installation and applications. Please install and operate the fixture according to instructions. Meanwhile, please keep this manual for future reference.

The MICROH ULTRA TRINITY 280 model is a moving head light with the latest advancements in smart, efficient and beautifully designed products. Combined with the advanced technology of today's stage lighting products, advanced control technology and it's very user-friendly industrial design; this unit fully complies with CE standards. The Ultra Trinity 280, uses a ceramic luminescent film reflector, coupled with high-quality optical lens and broadband voltage. These factors give you clear patterns; as well as sharp and uniform efficient light output. Intelligent LCD display module has an intuitive operating menu with shortcuts.

The MICROH ULTRA TRINITY 280 has 16/24 bit modes or DMX512 channels. Horizontal scan: 540 ° vertical scanning 270 ° (16bit precision scanning) electronic correction, dot-matrix display, four touch switch LCD + single-Key flying shuttle can spin. They can be inverted 180 °, the color wheel is combined with white and 14 colors. 2 Gobo wheels: 9 patterns + white effect round by 8 prism+ 6 prism and atomization function. 0-100% mechanical dimmer, mechanical strobe and variable strobe effect, strobe macro function. The optical system of the lens group electric focusing, the beam angle of 0 to 4 ° with overheating protection function Ultra Trinity 280 can be used in television, banquet and convention centres, nightclubs, large-scale performances and other professional venues. Please carefully unpack the fixture when you receive it and check to see if it was damaged during the transportation. Please check whether the following items are included inside the box:

Fixture - One **Power Cord** – One **User Manual** – One **Omega Bracket** – Two
Safety Cable – One **DMX Cable** - One

2. SAFTEY INSTRUCTIONS

This device has been delivered in safe working condition. In order to maintain this condition and to ensure safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

Important:
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature, and is dry.

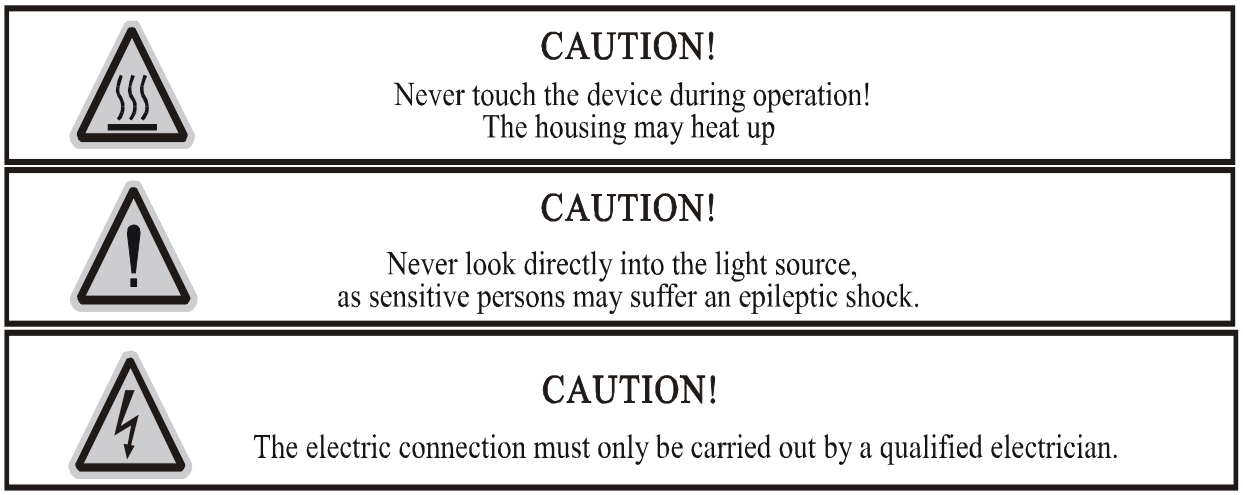
This device falls under protection-class I, therefore it is essential that the device be grounded. The electrical connection must be carried out by a qualified technician.

The device should only be used with rated voltage and frequency. Make sure that the available voltage is not higher than 120V as stated at the end of this manual.

Make sure the power cord is never crimped or damaged in any way, as this could cause shock and damage. If your power cord is damaged in any way, please purchase a new cable from your local MICROH dealer. Always disconnect power, when the device is not in use or before cleaning it. Never pull out the plug by tugging the power cord.

During initial start-up, some smoke or smell may arise. This is a normal process, and does not necessarily mean that the device is defective. It should decrease gradually. Please do not project the beam onto combustible substances.

Fixtures cannot be installed on or near combustible substances. Keep more than 3m distance from wall for proper ventilation and air flow. If your fixture is or has become damaged in any way, it shall be exclusively replaced or repaired by the manufacturer to avoid any hazard.


CAUTION!
Never touch the device during operation!
The housing may heat up
CAUTION!
Never look directly into the light source,
as sensitive persons may suffer an epileptic shock.
CAUTION!
The electric connection must only be carried out by a qualified electrician.

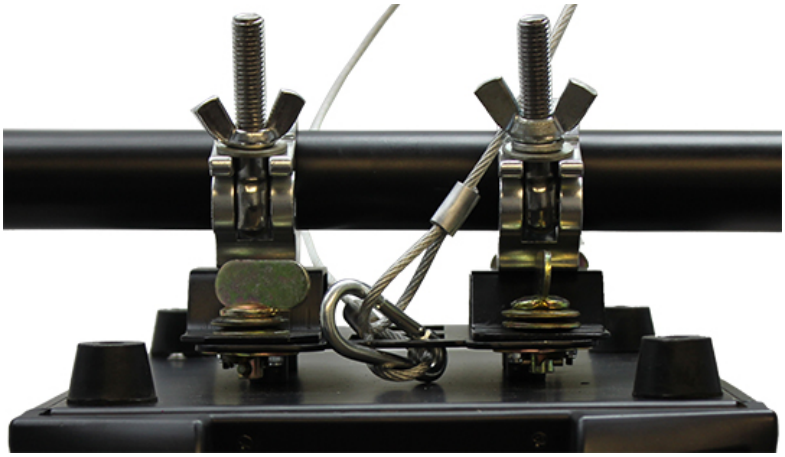
3. MOUNTING AND INSTALLATION

Caution: For added protection, mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by unauthorized personnel. Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight. Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable. Never stand directly below the device when mounting, removing, or servicing the fixture.

Whether installing inverted on a truss, ceiling or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 3m (3.3 ft.) away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Mounting Points: Overhead mounting requires extensive experience, including calculating working load limits. A knowledge of the installation material being used and periodic safety inspection of all installation material and the fixture are all imperative and should only be performed by a qualified technician. Improper installation can result in bodily injury and damage. Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

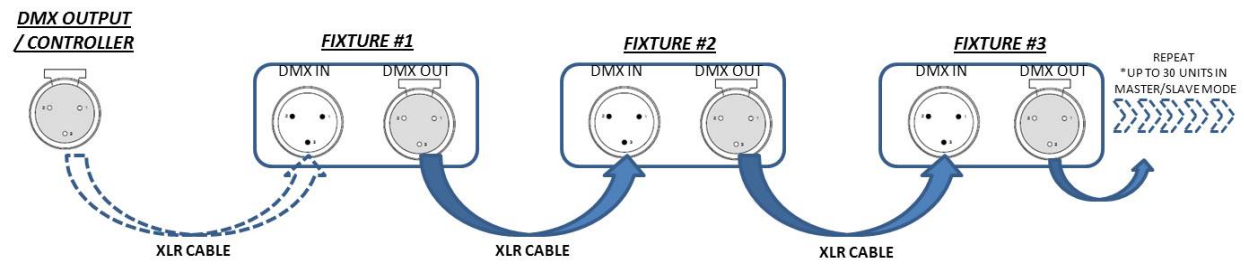
Clamp Mounting: The MICROH ULTRA TRINITY 280 provides a unique mounting bracket assembly that integrates 2 brackets to be used to mount on a truss or the floor. When mounting this fixture to truss, be sure to secure an appropriately rated clamp to the included bracket fitted through the center hole. As an added safety measure, be sure to attach at least one properly rated safety cable to the fixture.

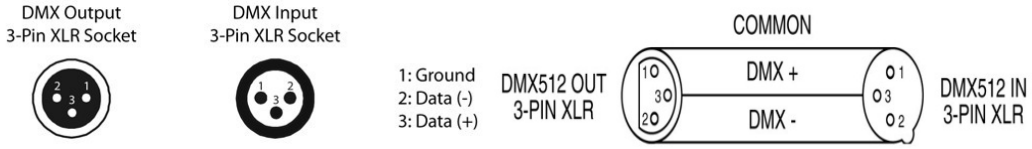


Regardless of the rigging option you choose for your MICROH ULTRA TRINITY 280, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

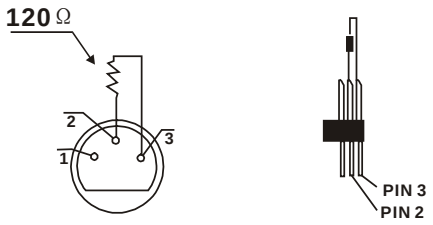
4. DMX-512 CONTROL CONNECTIONS

This fixture complies with international USITT DMX standards and can be used with either a 3 pin or 5 pin DMX connector. Plug in the provided 3 pin XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the MICROH ULTRA TRINITY 280. To connect the units to DMX, you must daisy chain the fixtures together as referred in the diagram below. Always end your DMX-512 connection with a DMX terminator.





For installations where the DMX cable has to run a long distance, or is in an electrically noisy environment, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3,which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



5. SETUP MENU

Display: Displays all of the fixture information

Control Wheel: Rotate Left or Right to scroll through menu. Press to select menu item

Main Menu	Submenu 1	Submenu 2	Function SET	Function description
DMX Address			001-512	DMX Address number set
Display	"ShowReve"		"Natu"	Normal
			"Revl"	reverse 180°
	"Language"		"Chin"	Chinese 中文
			"English"	English
	"BrigSett"		000-255	Brightness set
	"Backligh"		"60S "	Backlight close after delay 60S
			"Ligh"	Backlight light always
	MenuBack"		90S	Menu back to main menu after delay 90S
			"Off "	Menu back not automatic
	Backflah		open	Backlight blinking when no dmx
			off	Backlight not blinking when no dmx
	"Return "		▲	return
"Feature "	"XY Setup"	"Xreverse"	"Off "	PAN SCAN Normal
			"Open"	Pan Scan Reverse
		"Yreverse"	"Off "	Tilt Scan normal
			"Open"	Tilt Scan Reverse
		"XY Speed"	"Fast"	PAN/TILT FAST SPEED
			"NORM"	PAN/TILT NORMAL
			"Solw"	PAN/TILT SLOW
		"X Angle"	"360 ", "360 "	Pan Angle 360°
			"540 ", "540 "	Pan Angel 540°
			"630 ", "630 "	Pan Angel 630°
		"XY Fback"	"Off "	PAN/TILT optical sensor testing off
			"Open"	PAN/TILT optical sensor testing on
		Return	▲	Return
	"Shortcut"		"Off "	Shortcut off for colours and gobos
			"Open"	Shortcut open for colours and gobos
	"FullColr"		"Off "	half colour function
			"Open"	full colour function
	"ChanMode"		16 bit	16 bit mode
			24 bit	24 bit mode
	"ReceMode"		"DMX "	Accept DMX
			"Wire"	Accept Wireless
			"Auto"	AutoRun
	"RunMode "		"Slve"	Accept DMX & Slave
			"Musc"	Sound active
			"Auto"	Inside program Run automatically
	"SigClear"		"Off "	Keep last DMX position if data off
			Open	clear signal data
	DMX Reset		Off	Dmx reset not accept
			Open	Dmx reset accept
	Return		▲	Return

"LampSett"	"Default "		Off	Lamp off
			Open	Lamp on
	"Control "		Off	Lamp off by manual
			Open	lamp on by manual
	"DmxLamp "		"Off "	Close other signal control the lamp
			Open	Open other signal control the lamp
	"LampTime"		0000-9999	Lamp used time recorded
	"ClearTim"		★	Password input Enter
			"llum"	Clear Lamp time
	"LampStat"		Off	Lamp off
			Open	Lamp on
	Return		▲	Return
"InfoSee "	"WorkHour"		0000-9999	working hours memo for connect power
	"Times "		0000-9999	Open times memo
	"Fan1Rota"		0000-9999	Fan rotation speed 1
	"Fan2Rota"		0000-9999	Fan rotation speed 2
	"Version "		XMOA	Version
	Return		▲	Return
"Control "			Chan 00-Chan 40	Control the Channels
"AssiTool"	"Factory "		★	Password input Enter
			"Fold"	Recover Factory set
			"Save"	Save factory set
	"Defaults"		★	Password input Enter
			"Fold"	Recover to default
	Redress		★	Password input enter
			Reset01-10	Set the motors
	Chdefine		Colour wheel Rotation 001	Channels set by define
			000……040	Channels set by define
	"Brightne"		★	Password input Enter
		"TimeLimi"	0000-9999	Open fixture time limit
		"TimsLimi"	0000-9999	fixture times limit
		TimeCLEA	clear	Clear the time of used
		CutClea	clear	Clear the times of used
		"Passwor1"	000-255	Revise password 1
		"Passwor2"	000-255	Revise password 2
		"Passwor3"	000-255	Revise password 3
		"Passwor4"	000-255	Revise password 4
		"X Drivin"	000-255	pan main drive gear
		"X Driven"	000-255	Pan slave drive gear
		"Y Drivin"	000-255	Tilt main drive gear
		"Y Driven"	000-255	Tilt slave drive gear
		"LampPowe"	"Off "	Ballast earthed
			"total 5V", "Open"	Ballast 5V
		"YAngle "	000-255	Tilt angel rotation set
		"Return "	000-255	return
	"Checksum"	01-10"		Check Cabrilate data
	Return		▲	Return

CHANLEVE			Chan1..140	Show the dmx address
MotorRst			Colour...focus	Display the status
	Return		▲	
All Reset''			"Annu"	Cancel
			"Exec"	Reset
XY Rst	PAN/tilt RESET		"Annu"	Cancel
			"Exec"	Reset
EffecRst	Effect reset		"Annu"	Cancel
			"Exec"	Reset
"ExitMenu"			▲	Exit

6. DMX CHANNEL MODES (16 / 24)

MODE 1	MODE 2	DMX Value	Description
1	1	0－255	Pan
2	*	0－255	Pan Fine
3	2	0－255	Tilt
4	*	0－255	Tilt Fine
5	3	0－255	Pan/Tilt speed
6	4		**Special Functions**
		0－19	Empty
		20－24	Energy-saving mode（230W）
		25－129	Empty
		130－139	Lamp on by dmx
		140－149	PAN/TILT reset
		150－159	Empty
		160－169	Small motors reset
		170－199	Empty
		200－209	Full unit reset
		210－229	Empty
		230－239	Lamp off by dmx
		240－255	Empty

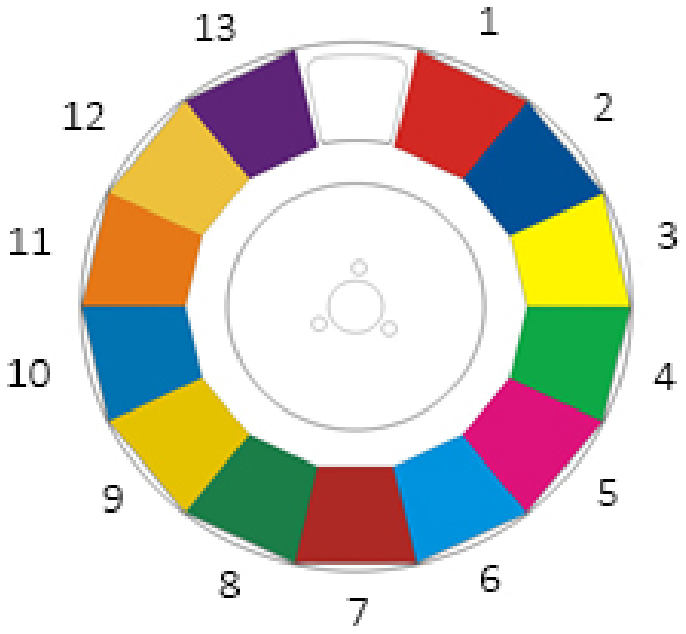
7	5		**Colours**
		0－8	White
		9－17	Red
		18－26	Dark Blue
		27－35	Yellow
		36－44	green
		45－53	Magenta
		54－62	Light blue
		63－71	Dark Orange
		72－80	Deep green
		81－89	Amber
		90－98	blue
		99－107	orange
		108－116	CTO
		117－127	UV
		128－129	White
		130－134	UV+CTO
		135－138	CTO+orange
		139－143	Orange+blue
		144－147	blue+amber
		148－152	Amber+Dark green
		153－157	Dark green+red
		158－161	Red+light blue
		162－166	Light blue+magenta
		167－171	magenta+green
		172－176	Green+yellow
		177－180	Yellow+Dark blue
		181－185	Dark blue+Red
		186－189	Red+white
		190－220	Speed fast to slow
		221－250	Speed slow to fast
		251－255	No function
8	*		Empty
9	6		Empty

10	7		**Static gobo**
		0－3	Empty
		4－9	Gobo 1
		10－15	Gobo 2
		16－21	Gobo 3
		22－27	Gobo 4
		28－33	Gobo 5
		34－39	Gobo 6
		40－45	Gobo 7
		46－51	Gobo 8
		52－57	Gobo 9
		58－63	Gobo 10
		64－69	Small beam 1
		70－75	Small beam 2
		76－87	Small beam 3
			Gobo shake slow to fast
		88－95	Gobo 5 Beam 1
		96－103	Gobo 5 Beam 2
		104－111	Gobo 5 Beam 3
		112－119	Gobo 10
		120－127	Gobo 9
		128－135	Gobo 8
		136－143	Gobo 7
		144－151	Gobo 6
		152－159	Gobo 5
		160－167	Gobo 4
		168－175	Gobo 3
		176－183	Gobo 2
		184－199	Gobo 1
		200－255	Static gobo speed slow to fast

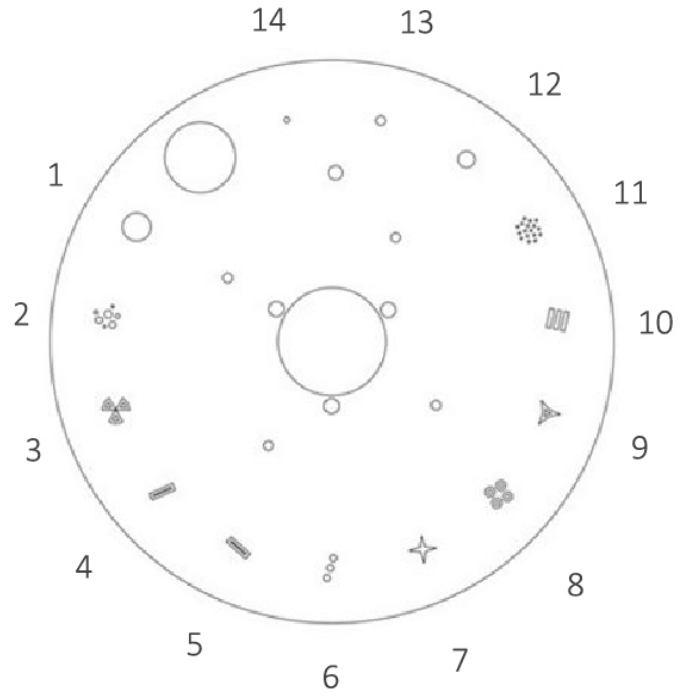
11	8		**Rotate gobo**
		0－8	Empty
		9－17	Gobo 1
		18－26	Gobo 2
		27－35	Gobo 3
		36－44	Gobo 4
		45－53	Gobo 5
		54－62	Gobo 6
		63－71	Gobo 7
		72－80	Gobo 8
		81－89	Gobo 9
			Gobo shake slow to fast
		90－97	Gobo 9
		98－106	Gobo 8
		107－115	Gobo 7
		116－124	Gobo 6
		125－133	Gobo 5
		134－142	Gobo 4
		143－151	Gobo 3
		152－160	Gobo 2
		161－169	Gobo 1
		170－179	Gobo 1 no movement
		180－217	Speed fast to slow
		218－255	Speed slow to fast
12	9		**Gobo rotation**
		0－127	index
		128－177	Speed slow to fast counter clockwise
		178－203	stop
		204－255	Speed fast to slow clockwise
13	*	0－255	Empty
14	10		**Prism**
		0－19	Empty
		20－75	6 linear prism
		76－255	8 facet prism
15	11		**Prism rotation**
		0－127	index
		128－191	Speed fast to slow clockwise
		192－193	Empty
		194－255	Speed slow to fast counter clockwise

16	12		Frost
		0－64	Empty
		65－255	linear frost
17	13		**Zoom**
		0－255	Linear zoom
18	*	0－255	Zoom fine
19	14	0－255	focus
20	*	0－255	Focus fine
21	*	0－255	Empty
22	15		**Shutter**
		0－31	Shutter close
		32－63	Shutter open
		64－95	Strobe slow to fast
		96－127	Shutter open
		128－143	Fast to slow, slow close fast open
		144－159	Slow to fast, fast open slow close
		160－191	Shutter open
		192－223	Random strobe slow to fast
		224－255	Shutter open
23	16		**Dimmer**
		0－255	Linear dimmer
24	*		Empty

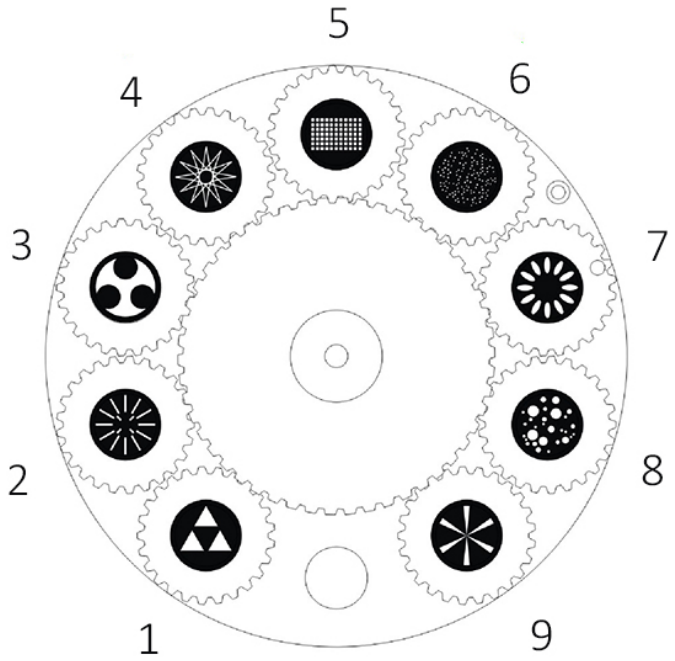
7. COLOUR WHEEL



8. STATIC GOBO

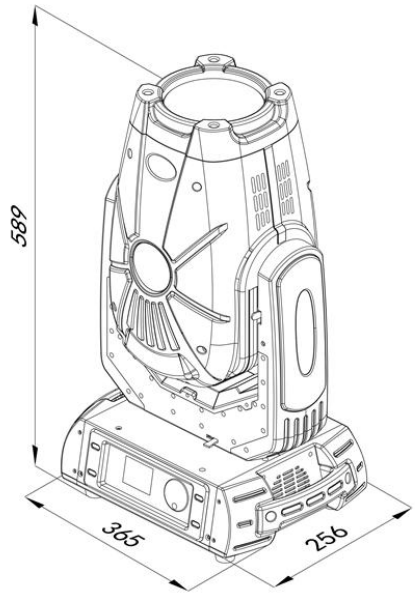


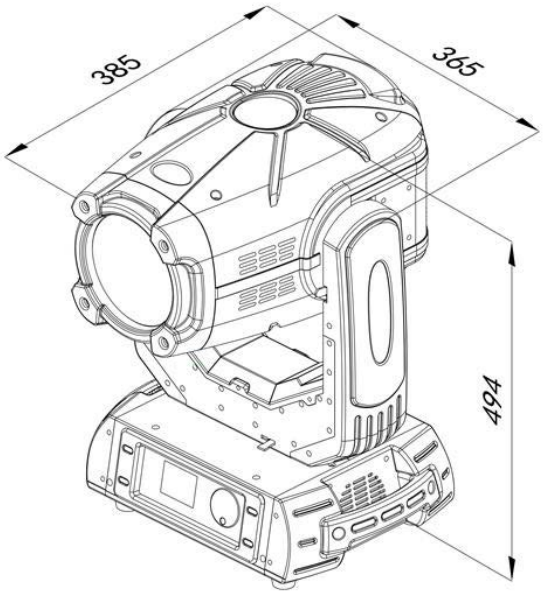
9. ROTATING GOBO



10. TECHNICAL SPECIFICATIONS

LAMP:	OSRAM SIRIUS HRI 280W 7800K
LAMP LIFE:	2000hr
COLOUR:	13 Colours + White
GOBOS:	Static Gobo - 14 + Open Rotating Gobo - 9 Replaceable + Open
GOBO SIZE:	Outside14.7mm, Viewing13.6mm
PRISM:	2 Rotating Prism, 6 Facet Linear 8 Facet.
BEAM:	2.5° to 8°
SPOT:	10° to 20°
WASH:	21° to 45°
CONTROL:	16/24CH DMX, Auto, Master Slave
DIMMER:	0 – 100% Linear
PAN/TILT:	540° Pan, 250° Tilt
POWER:	110~240V 470W 50/60hz
FIXTURE DIMENSION:	385 x 365 x 589mm (15.2”x14.4”x23.2”)
WEIGHT:	16kg (35.25Lbs)





11. HOW TO CHANGE LAMP

Attention! When replacing the lamp **DO NOT** touch the lamp with your bare hands, to oil on your skin may cause the lamp to explode once ignited.

1. Disconnect the power. Before replacing lamp, the fixture needs 20 minutes for lamp cooling. Lock the head in place using the Y axis lock in the 60 ° position.

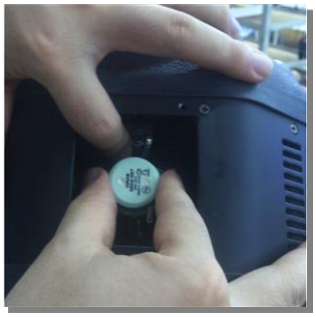
Use a Philips (star) screwdriver to open the lamp cover(picture 1)

（1）

2. After opening the cover, you can see the lamp inside. Be sure the lamp is cool prior to removing. (picture 2)

（2）

3. Use one hand to press the lamp holder and the other hand to remove the lamp. and pull out the wires (picture 3, 4)

（3） 

（4）

After taking out the lamp, please check the lens inside and make sure that it is clean and clear; this will help the light output.

(Picture 5)

(5)

Install the replacement lamp and the cover once finished.

11. MAINTENANCE AND CLEANING

The following points have to be considered during the inspection:

1) All screws for installing the device or parts of the device must be tightly connected, and must not be corroded.

2) There must not be any deformations on the housing, colour lenses, fixations or installation spots (ceiling, suspension, trussing).

3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.

4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage must be handled by a skilled installer or technician. Any safety issues must be resolved.

CAUTION
DISCONNECT POWER BEFORE SERVICING.

In order to keep the fixture in good condition and extend the life, we suggest regular cleaning to the fixture.

1) Clean the inside and outside lens each week to avoid the light output from darkening due to accumulation of dust, dirt, etc.

2) Clean the fan each week.

3) A detailed electrical check by approved technician every three months is advised. Ensure the circuit contacts are in good condition.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

There are no serviceable parts inside the device. Please refer to the instructions under “Installation instructions”.

Should you need any spare parts, please order genuine MICROH parts from your local dealer.

IF YOU SHOULD EXPERIENCE ANY PROBLEMS OR ISSUES PLEASE CONTACT MICROH PROFESSIONAL PRODUCTS BY EMAIL AT info@microhpro.com

In the event that your unit is defective in any way, please contact your local dealer to obtain an RA number for service repair.

DISCLAIMER – MICROH believes that the information contained within this user manual is accurate. However, MICROH is not responsible for any error or addendums to this manual. If you have any comments or general suggestions on how this manual can be improved please contact info@microhpro.com. Thank you.

Notes:

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